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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/541,461 | 03/31/2000 | ABRAHAM NATHAN | 1018.071US1 | 3662 |

23460 7590 02/20/2003

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EXAMINER

NARAYANASWAMY, SINDYA

ART UNIT PAPER NUMBER

2154

DATE MAILED: 02/20/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/541,461

Applicant(s)

NATHAN ET AL.

Examiner

Sindya Narayanaswamy

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 October 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1 – 18 are presented for examination.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-18 are rejected under 35 USC 103 as being unpatentable over Cohen et al., US-6,389,462, in view of Antur et al., US-6,243,815.

4. As per claim 1, Cohen et al. teach the invention substantially as claimed including, a computer-implemented method comprising: at a network-address-translation (NAT) component, performing address translation at a packet level of a stream of packets originating from a client and destined for a server (303, Fig. 3), the address translation redirecting the packets to a proxy component (305, Fig. 3) and masking a source of the packets (304, Fig. 3); and, the proxy

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component transmitting the packets to the server (309, Fig. 3) (col. 6, lines 19-20; col. 15, lines 9-34).

5. Cohen et al do not teach method of, at the proxy component, performing filtering at: a stream level of the stream of packets. However Antur et al teach the method of, at the proxy component, performing filtering at a stream level of the stream of packets (col. 4, lines 35-46). It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Antur et al. with the teachings of Cohen et al. because Antur et al's method of packet filtering provides an increased form of firewall security. One with ordinary skill in the art at the time would have been motivated to do so because it improves the security of the client-server system.

6. As per claim 2, Cohen et al. teaches the invention substantially as claimed including the method further comprising: the proxy component, the proxy component transmitting the packets of the second stream to the NAT component (proxy response); and, at the NAT component, performing address translation (translates IP destination address) at a packet level of the second stream of packets, the address translation redirecting the packets to the client (col. 8, lines 37-52).

7. Cohen et al. do not teach the performing of filtering at a stream level of a second stream of packets originating from the server and ostensibly destined for the NAT component. However, Antur et al teach the performing of filtering at a stream level of a second stream of packets

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originating from the server and ostensibly destined for the NAT component (col. 4, lines 35-46). It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Antur et al. with the teachings of Cohen et al. because Antur et al.'s method of packet filtering provides an increased form of firewall security. One with ordinary skill in the art at the time would have been motivated to do so because it improves the security of the client-server system.

8. As per claim 3, Cohen et al teach the method of, at a client, transmitting the stream of packets to the NAT component, the NAT component specified as a gateway at the client (col. 8, lines 45-49).

9. As per claim 4, Cohen et al do not specifically teach the method of claim 1 wherein the address translation redirects the packets to a socket of the proxy component. However, it would have been obvious to one of ordinary skill in the art at the time to incorporate the use of sockets in doing the redirection. One with ordinary skill in the art at the time would have been motivated to do for ease of design of the system.

10. As per claim 5, Cohen et al do not specifically teach the method wherein the proxy component transmits the packets from a socket thereof to the server. However, it would have been obvious to one of ordinary skill in the art at the time to incorporate the use of sockets in doing the redirection. One with ordinary skill in the art at the time would have been motivated to do so for ease of design of the system.

11. As per claims 6 and 7, they are the machine-readable medium versions of claims 1 and 2 and they are rejected for the same reasons as claims 1 and 2.

12. As per claim 8, Cohen et al teach a computer system comprising:

a client (101-1; Fig. 1);

a server with which the client communicates via a first stream of packets from the client to the server and a second stream of packets from the server to the client (107; Fig.1); and,

a network-address-translation (NAT)/proxy device designed to perform address translation at a packet level of the first and the second streams of packets (104, 115, Fig. 1) (301-309; Fig. 3).

13. Cohen et al do not teach the performing of filtering at a stream level of the first and the second streams of packets. However, Antur et al teach filtering at a stream level of the first and the second streams of packets (col. 4, lines 35-46). It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Antur et al. with the teachings of Cohen et al. because Antur et al's method of packet filtering provides an increased form of firewall security. One with ordinary skill in the art at the time would have been motivated to do so because it improves the security of the client-server system.

14. As per claims 9-14, they are rejected for the same reasons as claims 1-5 and 8.

15. As per claims 15-18, are rejected for the same reasons as claims 1-5.

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16. Claims 1, 6, 8, and 15 are rejected under 35 USC 103 as being unpatentable over Applicant's Admitted Prior Art (AAPA) in view of Antur et al., US-6,243,815.

17. As per claims 1, 6, 8, and 15 the AAPA teaches a method comprising: a network-address-translation (NAT) component, performing address translation at a packet level of a stream of packets originating from a client and destined for a server (page 2, lines 8-10) the address translation redirecting the packets to a proxy component and masking a source of the packets (page 2, lines 12-19); and, the proxy component transmitting the packets to the server 408, 402, Fig. 4).

18. The AAPA does not teach method of, at the proxy component, performing filtering at: a stream level of the stream of packets. However Antur et al teach the method of, at the proxy component, performing filtering at a stream level of the stream of packets (col. 4, lines 35-46). It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Antur et al. with the teachings of Cohen et al. because Antur et al's method of packet filtering provides an increased form of firewall security. One with ordinary skill in the art at the time would have been motivated to do so because it improves the security of the client-server system.

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Conclusion

19. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

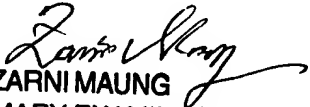
- a. "Address-Translating Connection Device," Yanagidate et al., US-6,128,664.
- b. "Domain Name Resolution In A Network Having Multiple Overlapping Address Domains," Cunningham et al., US-6,493,765.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sindya Narayanaswamy whose telephone number is (703) 305-8473. The examiner can normally be reached on 8 am to 5 pm, first Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (703) 305-9678. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-5404 for regular communications and (703) 305-5404 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

February 5, 2003


ZARNI MAUNG
PRIMARY EXAMINER